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| APPLICATION NO.             | FILING DATE                 | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------------------|-----------------------------|----------------------|---------------------|------------------|
| 10/537,905                  | 05/30/2006                  | Torsten Wahler       | 2002P16790WOUS      | 9223             |
| 28204<br>SIEMENS SCH        | 7590 12/07/2007<br>HWEIZ AG | EXAMINER             |                     |                  |
| I-47, INTELLECTUAL PROPERTY |                             |                      | PANG, ROGER L       |                  |
| ALBISRIEDEI<br>ZURICH, CH-  | RSTRASSE 245<br>8047        |                      | ART UNIT            | PAPER NUMBER     |
| SWITZERLAN                  |                             |                      | 3681                |                  |
|                             |                             |                      |                     |                  |
|                             |                             |                      | MAIL DATE           | DELIVERY MODE    |
|                             |                             |                      | 12/07/2007          | PAPER            |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| •   | Application No.  | Applicant(s)  |  |  |  |
|---|--|---|--|--|--|
|   | 10/537,905   | WAHLER, TORSTEN   |  |  |  |
| Office Action Summary   | Examiner   | Art Unit  |  |  |  |
|   | Roger L. Pang  | 3681  |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply  |  |   |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).                            | ATE OF THIS COMMUNI 36(a). In no event, however, may a vill apply and will expire SIX (6) MON cause the application to become Al | CATION. reply be timely filed ITHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133). |  |  |  |
| Status  |  |   |  |  |  |
| Responsive to communication(s) filed on      This action is FINAL. 2b)⊠ This      Since this application is in condition for allowar closed in accordance with the practice under E   | action is non-final.  nce except for formal mat  | ·   |  |  |  |
| Disposition of Claims   |  |   |  |  |  |
| 4)  Claim(s) <u>1-4</u> is/are pending in the application.  4a) Of the above claim(s) is/are withdraw  5)  Claim(s) is/are allowed.  6)  Claim(s) <u>1-4</u> is/are rejected.  7)  Claim(s) is/are objected to.  8)  Claim(s) are subject to restriction and/or   |  |   |  |  |  |
| Application Papers  |  |   |  |  |  |
| 9) The specification is objected to by the Examine 10) The drawing(s) filed on 30 May 2006 is/are: a) Applicant may not request that any objection to the Replacement drawing sheet(s) including the correction of the oath or declaration is objected to by the Examine 11) The oath or declaration is objected to by the Examine 10.  | ☐ accepted or b) ☐ object<br>drawing(s) be held in abeyation is required if the drawing  | nce. See 37 CFR 1.85(a).<br>i(s) is objected to. See 37 CFR 1.121(d).                                       |  |  |  |
| Priority under 35 U.S.C. § 119  |  | •   |  |  |  |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received. |  |   |  |  |  |
| Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date 1-19-07.   | Paper Not  | Summary (PTO-413)<br>s)/Mail Date<br>Informal Patent Application  |  |  |  |

Art Unit: 3681

#### DETAILED ACTION

The following action is in response to application 10/537,905 (including the preliminary amendment) filed on May 30, 2006.

#### **Drawings**

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the trapezoidal grooves (of claim 3) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency.

Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Fischer '555. With regard to claim 1, Fischer teaches a gearing comprising: a fixed, internally toothed internal gear 1, an annular, flexible toothed band 2 arranged so as to engage with the toothing of the internal gear, the toothed band having fewer teeth than the internal gear, and a rotatable wave generator 8 arranged to transmit a force to the toothed band via a tappet gear 3 such that a relative motion of the toothed band with respect to the internal gear results from a rotation of the wave generator, and a mating gear 4, and driving pins 6 (Paragraph 18 of the translation) shaped on a lateral face of the toothed band and arranged to engage in recesses of the mating gear (Fig. 2). With regard to claim 2, Fischer teaches the gearing, wherein the axes of the wave generator and of the mating gear are parallel, and in that the recesses in the mating gear are radially extending grooves (Fig. 1; Fig. 2). With regard to claim 3, Fischer teaches the gearing, wherein the grooves are trapezoidal (paragraph 18 of the translation).

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fischer as applied to claim 1 above, and further in view of Hirn '115. Fischer teaches the gearing, wherein the gearing components may comprise of plastic parts based on intended use and price of the gear construction (paragraph 18 of the translation), but lacks the specific teaching of using injection-molded plastid. Hirn teaches a wave generator, wherein the plastic parts are injection molded (Col. 8, lines 52-57). it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Fischer to employ injection-molded plastic parts in further view Hirn in order to provide cost effective parts (Col. 8, line 57).

### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Shirasawa, Bogelein, Ruttor and Acosta have been cited to show similar harmonic drives and wave generators.

Art Unit: 3681

#### FACSIMILE TRANSMISSION

Submission of your response by facsimile transmission is encouraged. The central facsimile number is (571) 273-8300. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase a patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as the PTO's mail room processing and delivery time. For a complete list of correspondence not permitted by facsimile transmission, see MPEP 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile transmission. Responses requiring a fee which applicant is paying by check should not be submitting by facsimile transmission separately from the check.

10/537,905

(Signature)

Art Unit: 3681

Responses submitted by facsimile transmission should include a Certificate of Transmission (MPEP 512). The following is an example of the format the certification might take:

| I hereby certify that this correspondence is being facsimile trans | smitted to the Patent and |
|--|---------------------------|
| Trademark Office (Fax No. (571) 273-8300) on                       | (Date)                    |
| Typed or printed name of person signing this certificate:          |                           |
|  |                           |

If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and MPEP 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response after your response has been transmitted by facsimile will only cause further unnecessary delays in the processing of your application; duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roger L. Pang whose telephone number is 571-272-7096. The examiner can normally be reached on 5:30am to 4:00pm.

10/537,905

Art Unit: 3681

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Charles Marmor can be reached on 571-272-7095. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR. Status

information for unpublished applications is available through Private PAIR only. For

more information about the PAIR system, see http://pair-direct.uspto.gov. Should you

have questions on access to the Private PAIR system, contact the Electronic Business

Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO

Customer Service Representative or access to the automated information system, call

800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Roger L Pang

Primary Examiner

Art Unit 3681

December 6, 2007